



“But I Can’t Even See Inside!”

LAB CRAWL 2008

INDIRECT OBSERVATION ACTIVITY #2

Summer 2008

“But I Can’t Even See Inside!” Indirect Observation Activity #2



Ob-Scertainer: A better black box.

structions and data sheets that can be reproduced for student use.

As such, this set of instructions is primarily devoted to some possible ob-scertainer alternative activities.

Each ObScertainer kit comes complete with in-

MATERIALS

- OB-SCERTAINER KIT
- DATA SHEET

Activity Directions

Best in small groups (+/- 3):

1. Record the number of the container you are testing.
2. Do not open the containers.
3. You will have 3 minutes per container.
4. Carefully shake and tilt the container.
5. From the sound and path of the steel ball, determine the

shape and location of the partition(s).

Draw your hypothesis in the first circle.

6. After 3 minutes, change containers with one of your partners and repeat steps 1-3.

7. After 3 minutes, change containers with your third partner and repeat steps 1-3.

8. When all team members have formed a hypothesis for each

of the 3 containers, choose one

container and form a group hypothesis about the inside partitions. Draw the team's hypothesis in

the second circle. Do this for all three containers.

9. Save the third circle in each line to fill in after your teacher has revealed the actual design.

S.S.S. Science Addressed:

SC.A.1.3
2.3

SC.D.1.3
2.3

SC.E.1.3

SC.G.1.3

SC.H.1.3
2.3
3.3

STUDENT ACTIVITY

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M&M Activity: Observe and record how the plate of M&Ms change after each shake:

TRIAL	# of Parent Material (face up M&Ms) <u>COLUMN A</u>	Ratio of parent material to TOTAL original (column A / 100)
Start	100	$100 / 100 = 100\%$
1		$/ 100 = \%$
2		$/ 100 = \%$
3		$/ 100 = \%$
4		$/ 100 = \%$

GROUP DATA: TRAIL	# of Parent Material (face up M&Ms) <u>COLUMN A</u>	% of Parent Material (face up M&Ms) <u>COLUMN A</u>
Start	*total M&Ms in class*	total / total = 100%
1		$/ \text{total} = \%$
2		$/ \text{total} = \%$
3		$/ \text{total} = \%$
4		$/ \text{total} = \%$

How would you BEST describe the overall change to the M&M population from one trial to the next?